

Claims

1. An information recording apparatus for executing a data recordation process, the information recording apparatus characterized by comprising:

a plurality of information recording means for recording data; and

a recordation control process executing section for executing a data recordation process to the information recording means and a generation process of control information during data reproduction;

the recordation control process executing section having a configuration for

generating, as the control information, reproduction procedure information on which a reproducing procedure of reproducing data is stored and reproduction management information on which link information to the reproduction procedure information is stored, during the data recordation process; and wherein

in the case of continuously executing a data recordation process to a plurality of information recording means, a plurality of pieces of reproduction procedure information are generated corresponding respectively to the plurality of information recording means, to execute a process of storing link information to the plurality of reproduction procedure

information to one piece of the reproduction management information.

2. An information recordation process according to claim 1, wherein the recordation control process executing section has a configuration for

executing, in the case of continuously executing a data recordation process to a plurality of information recording means, a process of storing the link information to the plurality of reproduction procedure information to one piece of the reproduction management information, and

executing a process of storing continue information representative of whether or not recording a same content in a corresponding data storage domain to individual pieces of reproduction procedure information, continuously to a next piece of reproduction procedure information.

3. An information recordation process according to claim 1, wherein the recordation control process executing section has a configuration for

executing, in the case of continuously executing a data recordation process to a plurality of information recording means, a process of storing the link information to the plurality of reproduction procedure information to one piece of the reproduction management information, and

executing a process of storing end information representative of whether or not corresponding to a final piece

of reproduction procedure information, in a corresponding data storage domain to an individual piece of reproduction procedure information.

4. An information recordation process according to claim 1, wherein the recordation control process executing section has a configuration for

executing a process of storing, in each piece of the reproduction procedure information, management information on data continuously recorded on one recording medium, and storing information enabling to determine a storage position of the data.

5. An information recordation process according to claim 1, wherein the recordation control process executing section has a configuration for

executing a comparison process of an available capacity for recording data between the plurality of information recording means, and selecting information recording means having a greater available capacity thereby commencing a data recordation process.

6. An information recordation process according to claim 1, wherein the recordation control process executing section has a configuration for

executing a comparison process of a remaining capacity of the information recording means under data recording with a preset threshold, and executing continuously a data recordation process to another information recording means on condition that

the remaining amount becomes less than the threshold.

7. An information recordation process according to claim 1, wherein the recordation control process executing section has a configuration for

executing a process of generating first reproduction procedure information when commencing a data recordation process to the information recording means, and storing link information to the first reproduction procedure information to the reproduction management information, and

generating new second reproduction procedure information in the case of executing continuing data recording to different information recording means, storing link information to the second reproduction procedure information to the reproduction management information, and executing a setting process of continue information representative of having next reproduction procedure information in corresponding data storage domain to the first reproduction procedure information.

8. An information reproduction apparatus for executing a data reproducing process, the information reproduction apparatus characterized by comprising:

a plurality of information recording means for subject-of-reproducing data; and

reproduction control process executing section for executing a reproducing process of data stored on the information recording means, depending upon control information;

the reproduction control process executing section having a configuration for

acquiring, as the control information, reproduction procedure information on which a reproducing procedure of reproducing data is recorded and reproduction management information on which link information to the reproduction procedure information is stored, during data recordation process; and wherein

in a case that there are a plurality of pieces of reproduction procedure information set linked to the reproduction management information, the plurality of pieces of reproduction procedure information are switched in order and applied as control information, and reproduction-of-subject data is acquired based on an individual piece of reproduction procedure information from different information recording means thereby effecting a reproduction process.

9. An information reproduction apparatus according to claim 8, wherein

the reproduction management information stores, in a corresponding data storage domain to each piece of reproduction procedure information, continue information representative of whether or not recording a same content continuously to next reproduction procedure information, and

the reproduction control process executing section has a configuration for

executing a process of determining whether or not to continuously execute reproduction control depending on another piece of reproduction procedure information, depending upon a setting of continue information in reproduction management information set for reproduction procedure information corresponding to data under reproduction.

10. An information reproduction apparatus according to claim 8, wherein the reproduction control process executing section has a configuration for

acquiring, from the reproduction procedure information, management information on data continuously recorded on one recording medium and information enabling to determine a storage position of data thereby effecting a data reproduction control process.

11. An information recording method for an information recording apparatus having a plurality of information recording means for recording data, the information recording method characterized by comprising:

a control information generating step of generating reproduction procedure information on which a reproducing procedure is recorded as reproduction control information corresponding to recording data, and reproduction management information on which link information to the reproduction procedure information is stored, during the data recordation process; and wherein

the control information generating step is to execute a process that

in the case of continuously executing a data recordation process to a plurality of information recording means, a plurality of pieces of reproduction procedure information are generated corresponding respectively to the plurality of information recording means, to store link information to the plurality of reproduction procedure information to one piece of the reproduction management information.

12. An information recording method according to claim 11, wherein, in the case of continuously executing a data recordation process to a plurality of information recording means, a process is executed of storing the link information to the plurality of reproduction procedure information to one piece of the reproduction management information, and

a process is executed of storing continue information representative of whether or not recording a same content in a corresponding data storage domain to individual pieces of reproduction procedure information, continuously to a next piece of reproduction procedure information.

13. An information recording method according to claim 11, wherein, in the case of continuously executing a data recordation process to a plurality of information recording means, a process is executed of storing the link information to the plurality of reproduction procedure information to one piece

of the reproduction management information, and

a process is executed of storing end information representative of whether or not corresponding to a final piece of reproduction procedure information, in a corresponding data storage domain to an individual piece of reproduction procedure information.

14. An information recording method according to claim 11, further including a step of storing, in each piece of the reproduction procedure information, management information on data continuously recorded on one recording medium, and storing information enabling to determine a storage position of the data.

15. An information recording method according to claim 11, further including a step of executing a comparison process of an available capacity for recording data between the plurality of information recording means, and selecting information recording means having a greater available capacity thereby commencing a data recordation process.

16. An information recording method according to claim 11, further including a step of executing a comparison process of a remaining capacity of the information recording means under data recording with a preset threshold, and executing continuously a data recordation process to another information recording means on condition that the remaining amount becomes less than the threshold.

17. An information recording method according to claim

11, further including a step of executing a process of generating first reproduction procedure information when commencing a data recordation process to the information recording means, and storing link information to the first reproduction procedure information to the reproduction management information, and generating new second reproduction procedure information in the case of executing continuing data recording to different information recording means, storing link information to the second reproduction procedure information to the reproduction management information, and executing a setting process of continue information representative of having next reproduction procedure information in corresponding data storage domain to the first reproduction procedure information..

18. An information reproducing method for an information reproducing apparatus having a plurality of information recording means for subject-of-reproducing data, the information reproducing method characterized by comprising:

a control information acquiring step of acquiring, as the control information, reproduction procedure information on which a reproducing procedure of reproducing data is recorded and reproduction management information on which link information to the reproduction procedure information is stored, during the data recordation process; and

a reproduction control process step that, in a case that there are a plurality of pieces of reproduction procedure

information set linked to the reproduction management information, the plurality of pieces of reproduction procedure information are switched in order and applied as control information, and reproduction-of-subject data is acquired based on an individual piece of reproduction procedure information from different information recording means thereby effecting a reproduction process.

19. An information reproducing method according to claim 18, wherein

the reproduction management information stores, in a corresponding data storage domain to each piece of reproduction procedure information, continue information representative of whether or not recording a same content continuously to next reproduction procedure information, and

the reproduction control process step includes

a step of executing a process of determining whether or not to continuously execute reproduction control depending on another piece of reproduction procedure information, depending upon a setting of continue information in reproduction management information set for reproduction procedure information corresponding to data under reproduction.

20. An information reproducing method according to claim 18, wherein the reproduction control process step includes

a step of acquiring, from the reproduction procedure information, management information on data continuously

recorded on one recording medium and information enabling to determine a storage position of data thereby effecting a data reproduction control process.

21. A computer program for executing an information recordation process in an information recording apparatus having a plurality of information recording means for recording data, the computer program characterized by comprising:

a control information generating step of generating reproduction procedure information on which a reproducing procedure is recorded as reproduction control information corresponding to recording data, and reproduction management information on which link information to the reproduction procedure information is stored, during the data recordation process; and

the control information generating step is set such that

in the case of continuously executing a data recordation process to a plurality of information recording means, a plurality of pieces of reproduction procedure information are generated corresponding respectively to the plurality of information recording means, to store link information to the plurality of reproduction procedure information to one piece of the reproduction management information.

22. A computer program for executing an information recordation process in an information recording apparatus having a plurality of information recording means for recording

subject-of-reproducing data, the computer program characterized by comprising:

a control information acquiring step of acquiring, as the control information, reproduction procedure information on which a reproducing procedure of reproducing data is recorded and reproduction management information on which link information to the reproduction procedure information is stored, during the data recordation process; and

a reproduction control process step that, in a case that there are a plurality of pieces of reproduction procedure information set linked to the reproduction management information, the plurality of pieces of reproduction procedure information are switched in order and applied as control information, and reproduction-of-subject data is acquired based on an individual piece of reproduction procedure information from different information recording means thereby effecting a reproduction process.